

TITLE SHEET

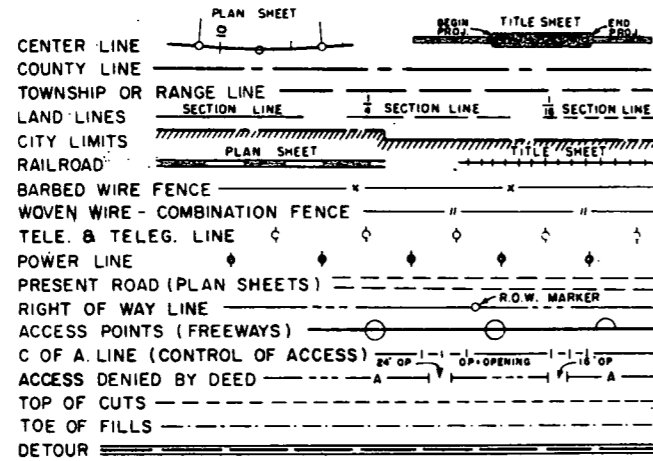
# COLORADO DEPARTMENT OF HIGHWAYS

R.O.W. Acquired Under I 70-3(16)212  
**AS CONSTRUCTED**  
REVISED DATE JAN 3 1967

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLORADO	I 70-3(22)217	1

Rev. Length, 7-1-63 J.R.W.  
Rev. Index, 8-19-63, J.R.W.

### CONVENTIONAL SIGNS



## PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJECT NO. I 70-3(22)217 STATE HIGHWAY NO. 91 SUMMIT COUNTY AS CONSTRUCTED REVISED

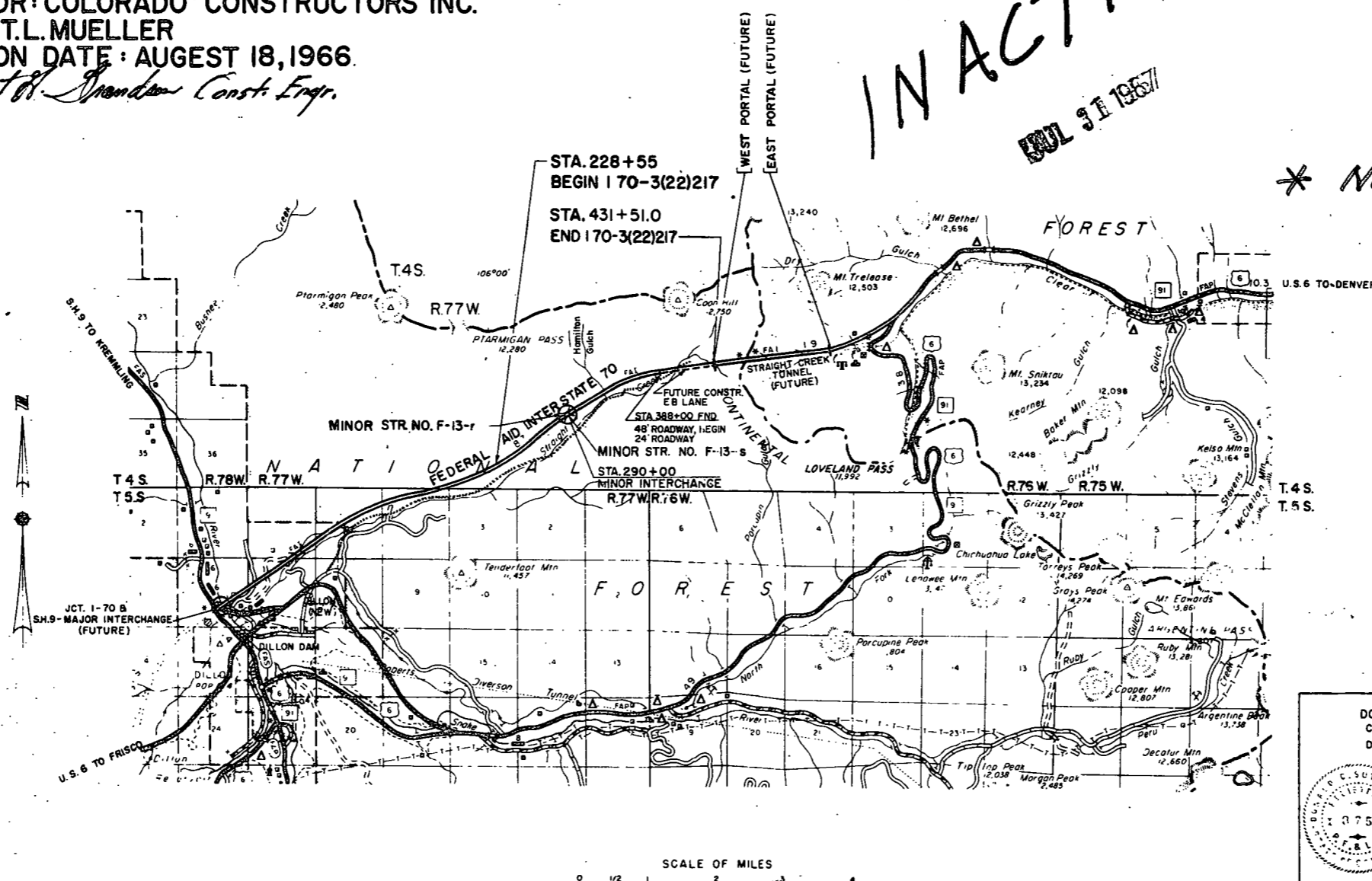
SCALES OF ORIGINAL DRAWINGS  
ON PLAN, 1 IN. = 100 FT.  
ON PROFILE, 1 IN. = 100 FT. HORIZONTAL  
1 IN. = 10 FT. VERTICAL  
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD.  
GROSS LENGTH OF PROJECT 20,307.5 FT. = 3.846 MILES.  
NET LENGTH OF PROJECT

- INDEX OF SHEETS
- SHEET NO. 1 SKETCH MAP AND TITLE PAGE.  
2 TYPICAL SECTIONS.  
3x GENERAL NOTES, TABULATION OF LENGTH & DESIGN AND R.O.W. MARKERS.  
3A ACCEPTABLE ALTERNATE PIPE UNDERDRAIN FOR PERFORATED UNDERDRAIN.  
4x-5x SUMMARY OF FINAL QUANTITIES.  
6x-7x FINAL LIST OF STRUCTURES.  
8-10 SUMMARY OF SOIL PROFILE TESTS.  
11x-12x DETAILS OF INTERCHANGE, STA. 290 ±  
13 GENERAL LAYOUT & DETAILS OF 20'X14' C.B.C., STA. 290 ±  
14 DETAILS OF PLAZA AREA.  
15-22 ALIGNMENT PLAN PROFILE.  
23x FINAL EARTHWORK SUMMARY.  
24x-34x STRUCTURE, ROADWAY & UNSUITABLE MATERIAL CROSS SECTIONS.  
345-349 SLIDE AREA STA. 235 to 360

CONTRACTOR: COLORADO CONSTRUCTORS INC.  
ENGINEER: T.L. MUELLER  
COMPLETION DATE: AUGUST 18, 1966.

*Robert H. Brandon Const. Engr.*

**INACTIVE**  
MAY 31 1967



SUPERELEVATION OF CURVES-DIVIDED HIGHWAYS.	(5-1-62)	M-1-D-1
APPROACH ROADS, FLARING, CUT-SLOPE TREATMENT.		
BRIDGE AND CREST WIDENING	(4-22-63)	M-2-A
LETTERS AND FIGURES FOR STRUCTURE NUMBERS	(5-1-62)	M-5-A
CONSTRUCTION TRAFFIC SIGNS ( 2 SHEETS )	(1-14-63)	M-6-B
IDENTIFICATION SIGNS	(5-1-62)	M-6-C
DITCH TYPES	(5-1-62)	M-13-A
BACKFILL AROUND STRUCTURES	(5-2-63)	M-16-A
CONCRETE MEDIAN INLETS	(7-2-63)	M-46-B
SINGLE AND DOUBLE CONCRETE BOX CULVERTS	(5-1-62)	M-46-C
WINGWALLS FOR CONCRETE BOX CULVERTS	(5-1-62)	M-46-E
TYPE "G" HEADWALLS	(5-1-62)	M-46-K
SADDLE TYPE HEADWALLS	(7-3-63)	M-46-L
MARKER POSTS AND BENCH MARKS	(5-1-62)	M-81-A
HEADWALLS AND APRONS FOR C.M.P. CULVERTS	(5-1-62)	M-95-A
20'X16', 20'X14', 16'X14', 14'X14' CONCRETE BOX CULVERTS-90° SKEW ONLY, VARIOUS FILL HEIGHTS	(5-1-62)	M-46-G

\* No. 23x is not in this set. 3/14/67

SEE SPECIAL PROVISIONS FOR NOTICE TO BIDDERS

COLORADO DEPARTMENT OF HIGHWAYS

APPROVED: *Michael W. ...* 5-1-63  
CHIEF ENGINEER DATE

DONALD C. SUTHERLAND, INC.  
CONSULTING CIVIL ENGINEERS  
DENVER COLORADO

Dec 27 1962  
SUBMITTED BY: *Donald C. Sutherland*  
P.E. & L.S. COLO # 375

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

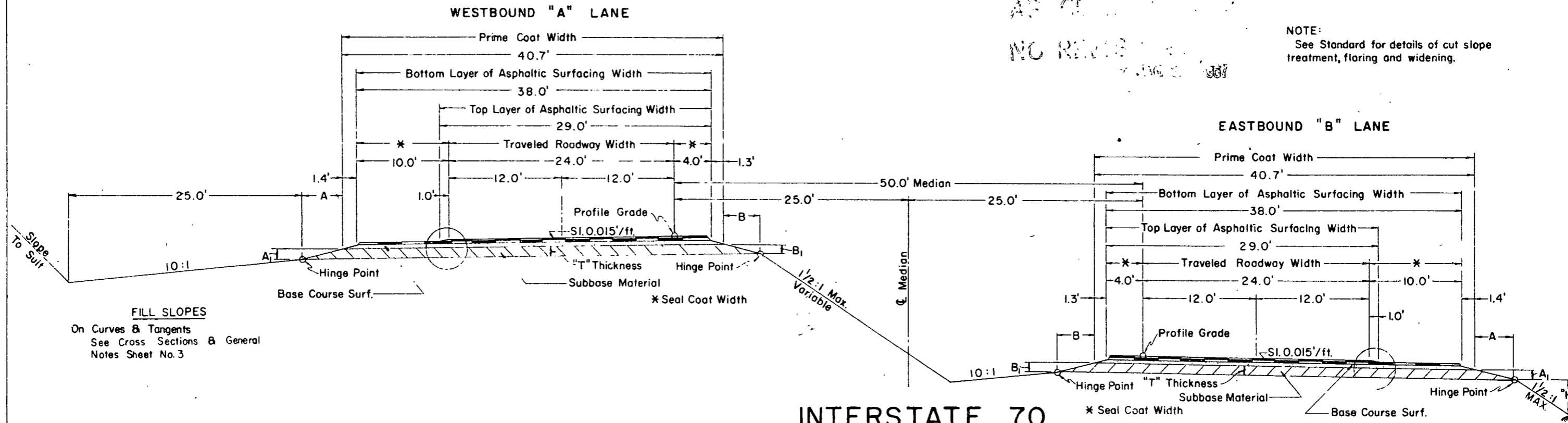
APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_  
DIVISION ENGINEER

# TYPICAL SECTIONS OF IMPROVEMENTS

FEDERAL ROAD REGION NO	DISTRICT	PROJ. NO	SHEET NO	TOTAL SHEETS
9	COLORADO	170- (22)217	2	3

AS OF 1/1/60  
NO REVISIONS

NOTE:  
See Standard for details of cut slope treatment, flaring and widening.



**FILL SLOPES**  
On Curves & Tangents  
See Cross Sections & General  
Notes Sheet No. 3

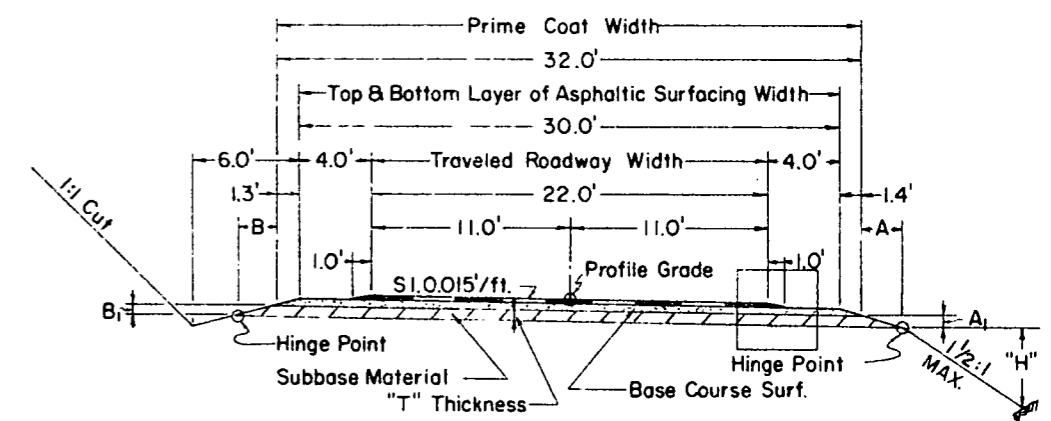
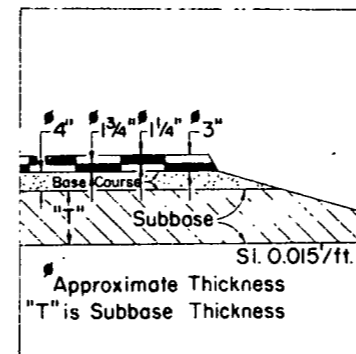
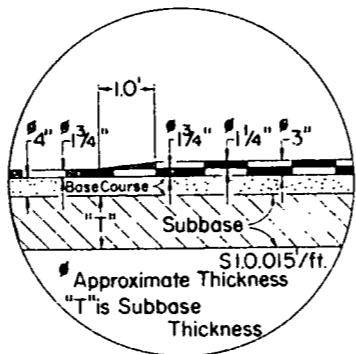
**INTERSTATE 70**  
"A" & "B" LANES VARY IN  
ELEVATION FROM 0.0' MIN.  
TO 12.5' MAX.

The depth and width of the side ditch shall be varied where necessary in order to provide proper drainage and/or entrance to drainage structures.  
Excavation below 4:1 slope and/or 10:1 slope will not be permitted.

**HINGE & GRADE POINT DIMENSIONS**

Subbase Thickness Inches	A	A <sub>1</sub>	B	B <sub>1</sub>
6	2.1'	0.5'	1.9'	0.5'

I 70  
ACCESS ROADS



**ACCESS ROADS FOR  
MINOR INTERCHANGE**  
STA. 290+00

NOTE:  
Limit of Construction under this Contract  
is to bottom of Subbase Material.

### GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado Department of Highways, adopted January 1, 1958.

All quantities on preliminary plans are to be considered approximate only.

Approximate location and quantities involved in construction of intercepting ditches are tabulated on the "Structure Quantities" sheet.

If excavation operations develop materials which will stand on slopes steeper than slope stake lines, the Department reserves the right to change cut slopes during the progress of such excavations.

Embankments shall be placed to the limits indicated on cross sections or as staked by the Engineer by intercept of 1 1/2 : 1 fill slopes. Where flatter slopes are indicated or designated by the Engineer, unsuitable material or waste material shall be placed to obtain the flatter fill slopes. Mucking or removal of unsuitable material and wetting and compaction of embankments beyond the intercepts of 1 1/2 fill slopes shall be as ordered by the Engineer.

Where Perforated and Unperforated Pipe are called for on Plans, the Unperforated Pipe shall be placed under the Roadway.

**AS CONSTRUCTED**  
REVISED DATE JAN 25 1967

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I 70-3(22)217	3X	349

R.O.W. Marker Tabulation (Page 81 Structure Book)

Station	Dist. Lt.	Roadway		Dist. R.T.	Roadway	
		24' 48'			24' 48'	
234+37.2 ST.	200'	/	—	—	—	—
244+18.7 ST.	250'	/	230'		/	
250+78.2 BK=? } P.C. 250+75.0 Ah. }	250'	/	230'		/	
261+75.0 P.T.	250'	/	300'		/	
269+43.5 T.S.	—		300'		/	
279+10.2 ST.	—		400'		/	
299+17.6 T.S.			350'		/	
309+32.0 BK=? } 309+34.0 Ah. } S.T.	400'	/	350'		/	
318+85.5 BK=? } 318+86.1 Ah. } T.S.	400'	/	300'		/	
332+86.9 BK=? } 332+70.9 Ah. } S.T.	—		333.58		/	
348+65.6 BK=? } 348+76.5 Ah. } T.S.	250'	/	400'		/	
359+00.2 ST.	250'	/	350'		/	
367+84.0 BK=? } 367+92.3 Ah. }	250'	/	350'		/	
378+92.3 ST.	250'	/	350'		/	
388+21.6 BK=? } P.C. 388+11.4 Ah. }	250'	/	350'		/	
398+05.5 P.T.	—		400'		/	
416+58.0 ST.	200'	/	200'		/	
420+62.1 T.S. (Orig)	200'	/	200'		/	
428+40.5 C.S. (Orig)	200'	/	200'		/	
432+23.3 BK=? } (Orig) 38+99.4 Ah. }	250'	/	350'		/	
Total		5	10		6	13
24 ft. Roadway					11	34
48 ft. Roadway					23	

Tabulation of Length & Design Data

Station	Roadway		Miles
	24 Ft. Lin. ft.	48 Ft. Lin. ft.	
228+55 Begin I 70-3(22)217		596.1	
234+51.1 BK=? Equa. 234+47.2 Ah.		1631.0	
250+78.2 BK=? Equa. 250+75.0 Ah.		3925.0	
290+00 Minor Interchange		1932.0	
309+32.0 BK=? Equa. 309+34.0 Ah.		951.5	
318+85.5 BK=? Equa. 318+86.1 Ah.		1400.8	
332+86.9 BK=? Equa. 332+70.9 Ah.		1594.7	
348+65.6 BK=? Equa. 348+76.5 Ah.		1907.5	
367+84.0 BK=? Equa. 367+92.3 Ah.		2007.7	
388+00 388+00 388+21.6 BK=? Equa. 388+11.4 Ah.	21.6		
431+51.0 End I 70-3(22)217	4339.6		
TOTAL	4361.2	15,946.5	
TOTAL		Lin. ft.	Miles
24 ft. Roadway	4361.2		0.826
48 ft. Roadway		15,946.3	3.020
Total Gross Length		20,307.5	3.846

OF HIGHWAYS

FEDERAL ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	170-3(22)27	3A	

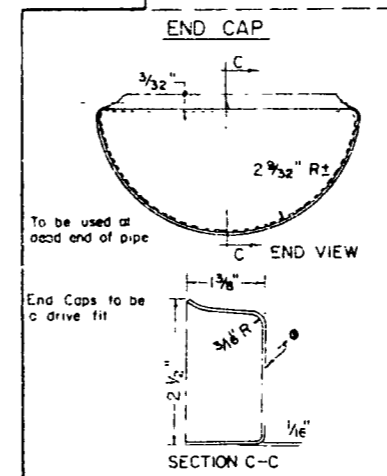
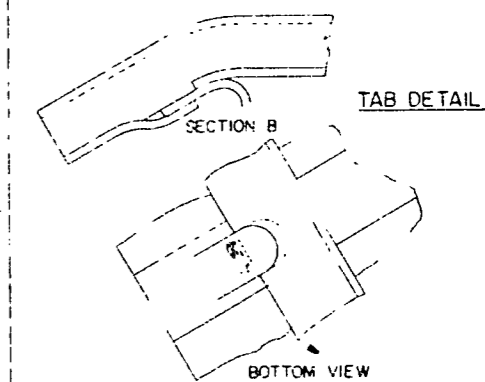
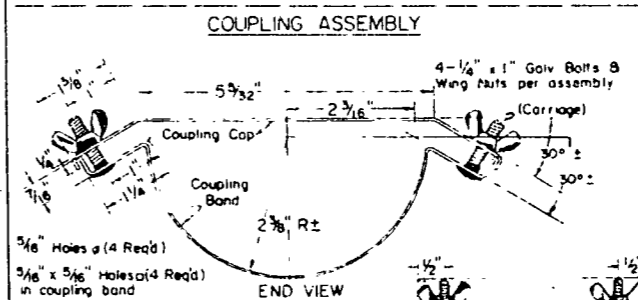
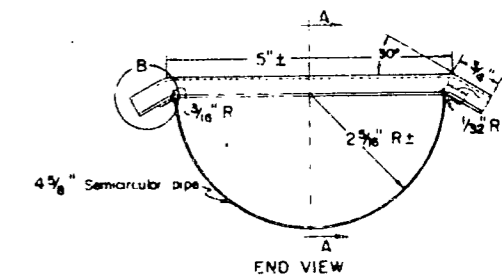
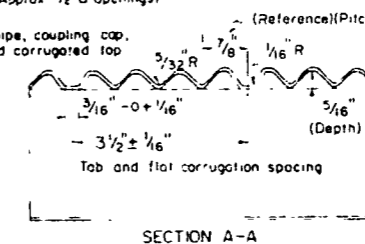
New sheet 8-19-63 J.R.W.

REVISED JAN 1967

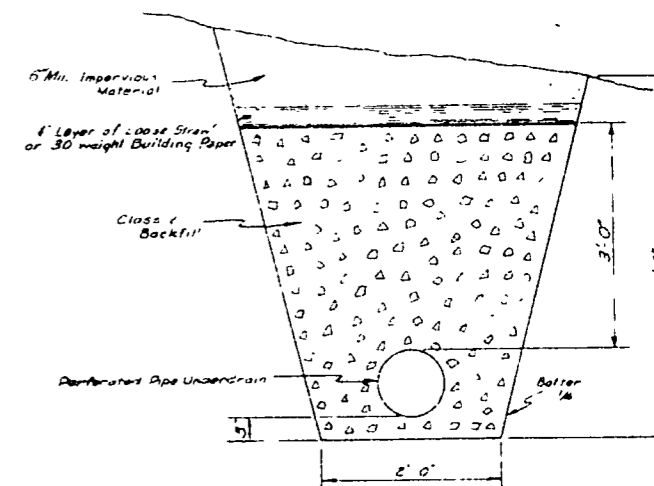
### ACCEPTABLE ALTERNATE PIPE UNDERDRAIN FOR PERFORATED UNDERDRAIN

Screen end cap to be used at outlet of pipe. Screen shall be 2 x 2 mesh No. 17 gage (Galvanized) (Approx. 1/2" openings).

The semicircular smooth pipe, coupling cap, coupling band, end cap and corrugated top shield shall be 18 gage galvanized.



### TYPICAL SECTION OF TRENCH FOR PIPE UNDERDRAIN



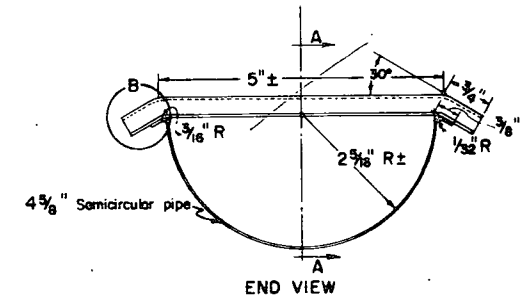
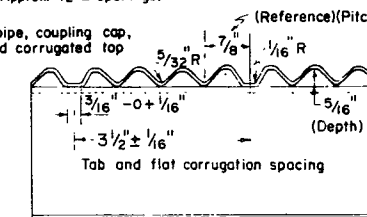
FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	170-3(22) 217	3A	

New sheet 8-19-68 J.R.W.

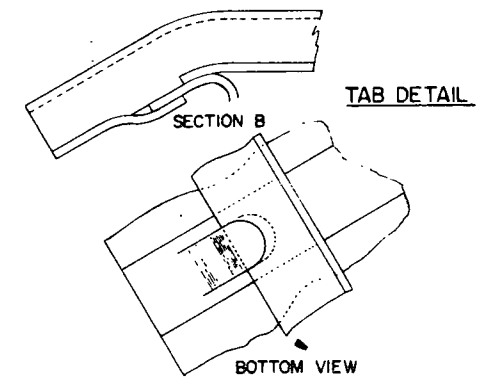
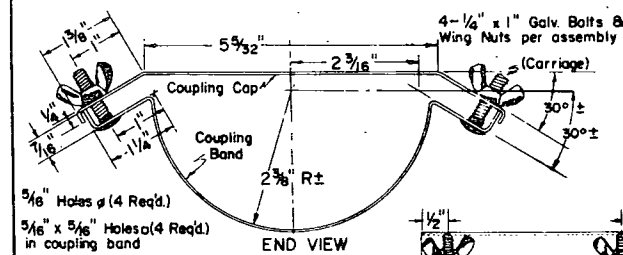
ACCEPTABLE ALTERNATE PIPE UNDERDRAIN FOR PERFORATED UNDERDRAIN

Screen end cap to be used at outlet of pipe. Screen shall be 2 x 2 mesh No. 17 gage. (Galvanized) (Approx. 1/2" openings)

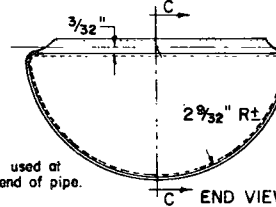
The semicircular smooth pipe, coupling cap, coupling band, end cap and corrugated top shield shall be 18 gage, galvanized.



COUPLING ASSEMBLY

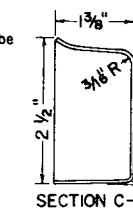


END CAP

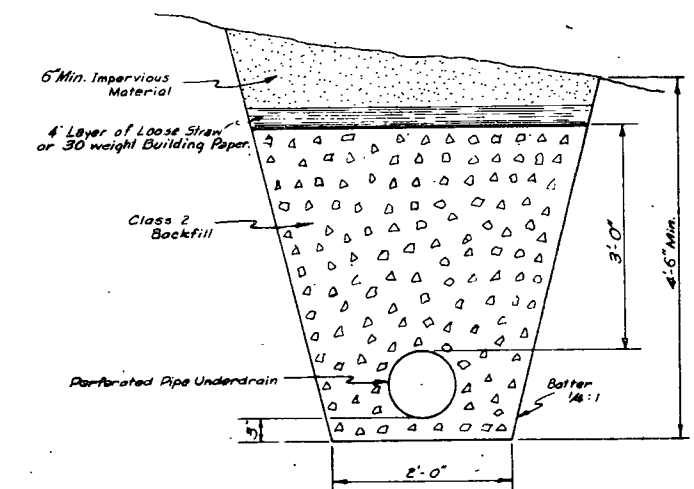


To be used at dead end of pipe.

End Caps to be a drive fit.



TYPICAL SECTION OF TRENCH FOR PIPE UNDERDRAIN



## SUMMARY OF APPROXIMATE QUANTITIES

REVISED 8/19/63 J.R.W.  
① Rev. 5/18/64 - W.O. No. 653 - W. E. M.

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1-70-3(22)217	4	

SPECIFICATION ITEM NO.	ITEM	UNIT	24' ROADWAY	48' ROADWAY *	W. O. NO. ① 653	PROJECT TOTALS
10	Clearing and Grubbing	Acre	31	128		159
13	Unclassified Excavation	Cu. Yd.	510,200	2,651,100		3,161,300
13	Unclassified Ditch Excavation	Cu. Yd.	60	140		200
14	Unclassified Structural Excavation - Miscellaneous	Cu. Yd.	620	6,570		7,190
16	Structural Backfill (Class X)	Cu. Yd.	840	2,440		3,280
17	Compaction - Modified	Cu. Yd.	489,000	2,530,000		3,019,000
17	Wetting	M. Gal.	12,230	63,250		75,480
18	Station Yard Overhaul	Sta. Yd.	2,620,000	6,551,000		9,171,000
18	Yard Mile Overhaul	Yd. Mi.	19,300	200,100		219,400
46	Class "A" Concrete	Cu. Yd.	359	672	84	⊕ 1,031
47	Reinforcing Steel	Lb.	32,710	87,620	12,647	⊕ 120,330
53	18" Corrugated Metal Pipe Culvert	L.F.		44		44
53	24" Corrugated Metal Pipe Culvert	L.F.	616	4,291		4,907
53	24" Corrugated Metal Pipe Culvert, 14 Gage	L.F.	152	104		256
53	48" Corrugated Metal Pipe Culvert	L.F.		484		484
53	60" Corrugated Metal Pipe Culvert	L.F.	130	228		358
53	60" Corrugated Metal Pipe Culvert, 8 Gage	L.F.		204		204

⊕ Quantities for W. O. No 653 not included

### SUMMARY OF APPROXIMATE QUANTITIES

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1 70 -3(22)217	5	

SPECIFICATION ITEM NO.	ITEM	UNIT	24" ROADWAY	48" ROADWAY *	PROJECT TOTALS
65	Concrete Slope and Ditch Paving	Cu. Yd.	14	482	496
71	8" Perforated Corrugated Metal Pipe Underdrain	Lin. Ft.	150	3,550	3,700
71	8" Unperforated Corrugated Metal Pipe Underdrain	Lin. Ft.	276	2,622	2,898
81	Right - of - Way Markers	Ea.	11	23	34
95	24" Metal Aprons for Corrugated Metal Pipe Culverts	Ea.	3	21	24
95	48" Metal Aprons for Corrugated Metal Pipe Culverts	Ea.		1	1
132	Inlet Grating and Frame (Median)	Ea.	2	30	32
	<u>FORCE ACCOUNT</u> Clearing of Building Sites, Including Removal of Foundations and Appurtenances.	Lump Sum		•	•

\* Includes quantities for Ramps "A", "B" & "C" at Interchange Sta. 290±













Interchange Crossing Under I-70  
 Station 290+00

AS CONSTRUCTED  
 REVISED DATE JAN 8 1967

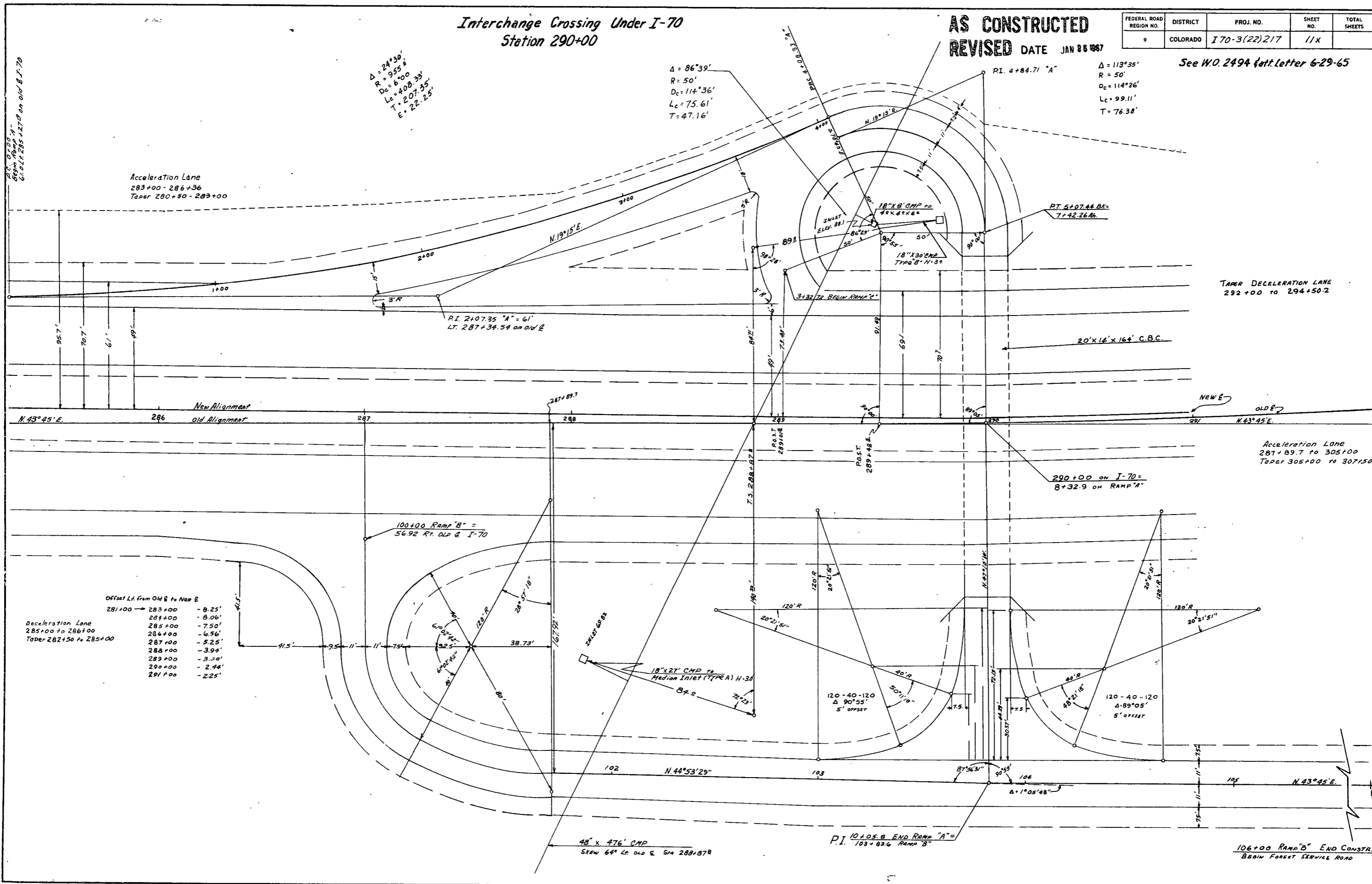
FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I 70-3(22)217	11X	

See W.O. 2494 (att. Letter 6-29-65)

$\Delta = 24^{\circ}30'$   
 $R = 955'$   
 $D_c = 6^{\circ}00'$   
 $L_c = 408.33'$   
 $T = 207.35'$   
 $E = 22.25'$

$\Delta = 86^{\circ}39'$   
 $R = 50'$   
 $D_c = 114^{\circ}36'$   
 $L_c = 75.61'$   
 $T = 47.16'$

$\Delta = 113^{\circ}35'$   
 $R = 50'$   
 $D_c = 114^{\circ}36'$   
 $L_c = 99.11'$   
 $T = 76.38'$



Acceleration Lane  
 283+00-286+36  
 Taper 280+50-283+00

TAPER DECELERATION LANE  
 292+00 TO 294+50.2

Acceleration Lane  
 287+89.7 to 305+00  
 Taper 305+00 to 307+50

Offset Lt. from Old to New E

281+00	-8.25'
283+00	-8.06'
285+00	-7.50'
286+00	-6.56'
287+00	-5.25'
288+00	-3.94'
289+00	-3.30'
290+00	-2.44'
291+00	-2.25'

Deceleration Lane  
 285+00 to 286+00  
 Taper 282+50 to 285+00

48' x 476' CMP  
 Skew 64° Lt. Old G. Sta 288+87R

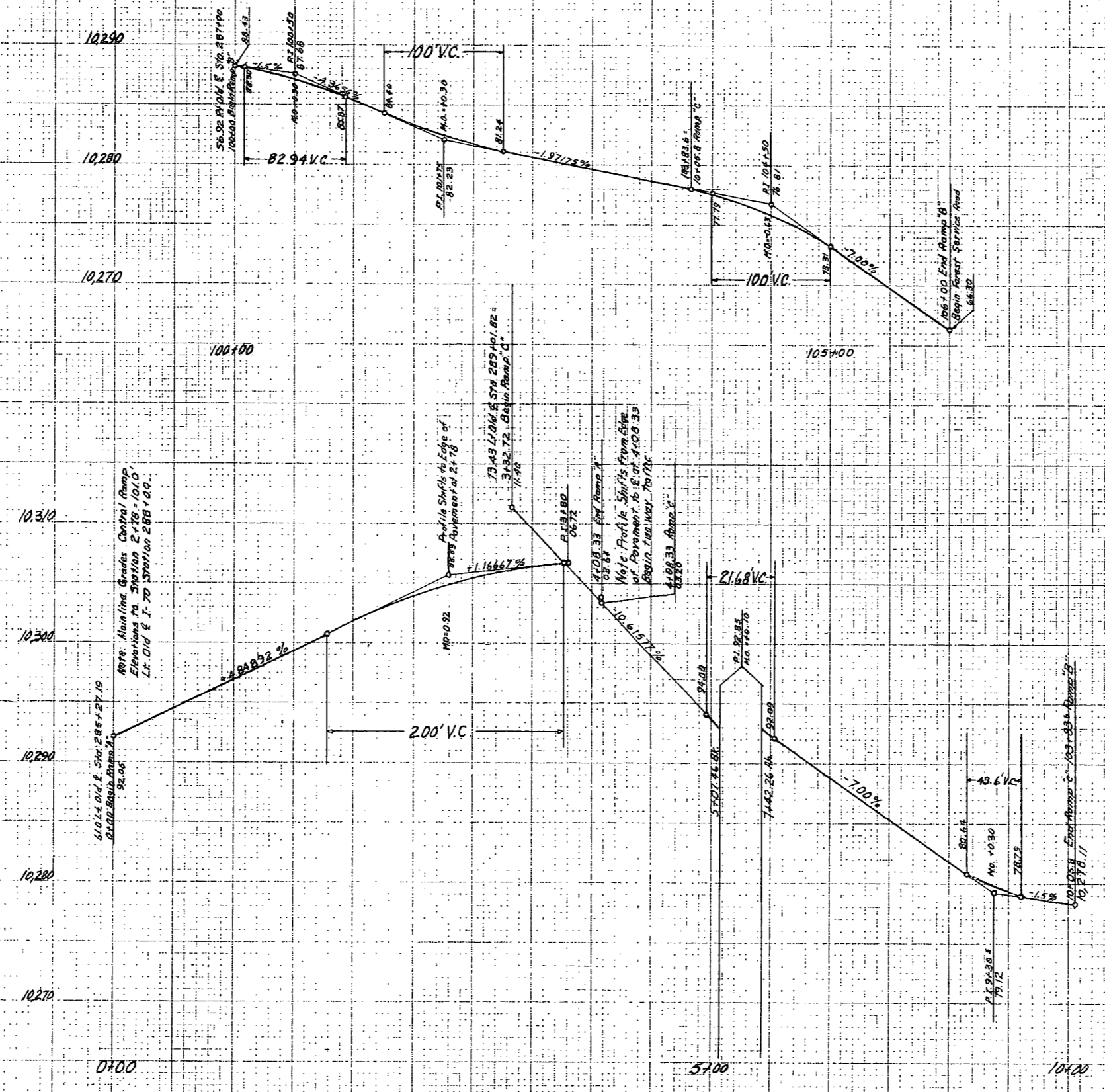
P.I. 10+05.8 END RAMP "A"  
 103+83.6 RAMP "B"

106+00 RAMP "B" END CONSTR.  
 BRAIN FOREST SERVICE ROAD

AS CONSTRUCTED  
 REVISION DATE JAN 24 1987

PROJ. NO.	SHEET NO.	TOTAL SHEETS
I-70-3(22)217	12X	

Interchange Crossing Under I-70  
 Station 290+00  
 Ramps A, B & C  
 W.D. #2494





FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1 70-3(22) 217	23	

REVISED 8/19/63 J.R.W.

### EARTHWORK SUMMARY

<b>UNCLASSIFIED EXCAVATION</b>	<b>24' ROADWAY</b>	<b>48' ROADWAY</b>	<b>PROJECT TOTALS</b>
FROM CROSS SECTIONS	460,060 Cu.Yds.	2,379,303 Cu. Yds.	2,839,363 Cu. Yds.
FROM WIDENED CUTS			
ESTIMATED FOR OVERBREAK AND SUBSIDENCE	46,006 Cu. Yds.	237,930 Cu. Yds.	283,936 Cu. Yds.
STRUCTURE QUANTITIES AS EXCAVATION	25 Cu. Yds.	115 Cu. Yds.	140 Cu. Yds.
STRUCTURE QUANTITIES AS EMBANKMENT	3,722 Cu.Yds.	32,160 Cu. Yds.	35,882 Cu. Yds.
* UNSUITABLE MATERIAL	319 Cu. Yds.	1,511 Cu. Yds.	1,830 Cu. Yds.
ESTIMATED FOR CUTSLOPE TREATMENT			
<b>TOTALS</b>	<b>510,132 Cu. Yds.</b>	<b>2,651,019 Cu. Yds.</b>	<b>3,161,151 Cu. Yds.</b>
<b>UNCLASSIFIED EXCAVATION x FACTOR</b>	<b>460,060 Cu. Yds.</b>	<b>2,379,303 Cu. Yds.</b>	<b>2,839,363 Cu. Yds.</b>
WIDENED DITCHES x FACTOR			
<b>TOTALS</b>	<b>460,060 Cu. Yds.</b>	<b>2,379,303 Cu. Yds.</b>	<b>2,839,363 Cu. Yds.</b>
<b>EMBANKMENT</b>			
FROM CROSS SECTIONS	402,348 Cu.Yds.	2,437,015 Cu. Yds.	2,839,363 Cu. Yds.
<b>TOTALS</b>	<b>402,348 Cu. Yds.</b>	<b>2,437,015 Cu. Yds.</b>	<b>2,839,363 Cu. Yds.</b>
<b>COMPACTION</b>			
UNCLASSIFIED EXCAVATION	460,060 Cu.Yds.	2,379,303 Cu. Yds.	2,839,363 Cu. Yds.
BASE OF CUTS AND FILLS	28,841 Cu.Yds.	150,194 Cu. Yds.	179,035 Cu. Yds.
<b>TOTALS</b>	<b>488,901 Cu. Yds.</b>	<b>2,529,497 Cu. Yds.</b>	<b>3,018,398 Cu. Yds.</b>
<b>STATION YARD OVERHAUL</b>			
FROM MASS DIAGRAM	2,381,134 Sta. Yds.	5,954,694 Sta. Yds.	8,335,828 Sta. Yds.
ESTIMATED FOR OVERBREAK AND SUBSIDENCE	238,113 Sta. Yds.	595,469 Sta. Yds.	833,582 Sta. Yds.
<b>TOTALS</b>	<b>2,619,247 Sta. Yds.</b>	<b>6,550,163 Sta. Yds.</b>	<b>9,169,410 Sta. Yds.</b>
<b>YARD MILE OVERHAUL</b>			
FROM MASS DIAGRAM	17,480 Yd. Mi.	181,852 Yd. Mi.	199,332 Yd. Mi.
ESTIMATED FOR OVERBREAK AND SUBSIDENCE	1,748 Yd. Mi.	18,185 Yd. Mi.	19,933 Yd. Mi.
<b>TOTALS</b>	<b>19,228 Yd. Mi.</b>	<b>200,037 Yd. Mi.</b>	<b>219,265 Yd. Mi.</b>
<b>UNCLASSIFIED DITCH EXCAVATION</b>			
FROM STRUCTURE QUANTITIES	60 Cu. Yds.	77 Cu. Yds.	137 Cu. Yds.
<b>TOTALS</b>	<b>60 Cu. Yds.</b>	<b>77 Cu. Yds.</b>	<b>137 Cu. Yds.</b>

\* Used for flattening fill slopes within freehaul

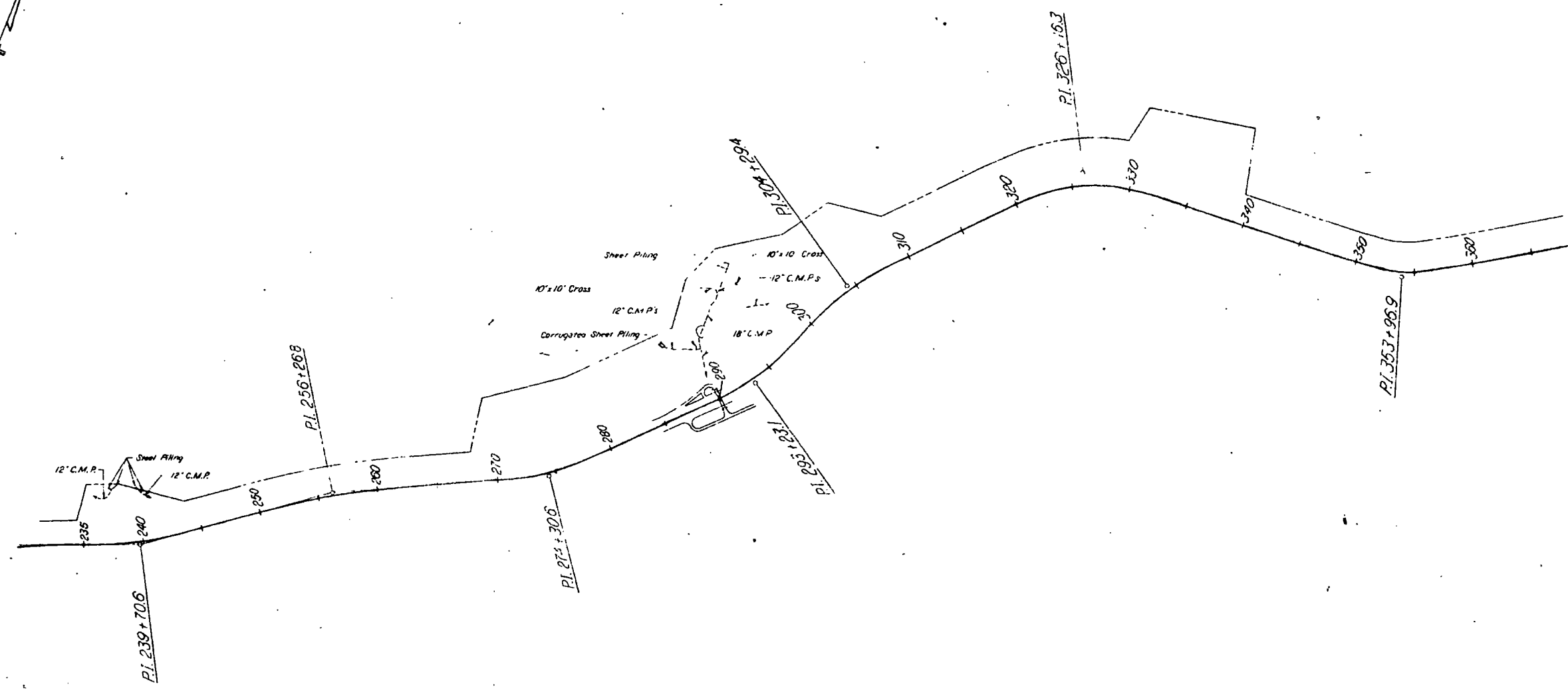
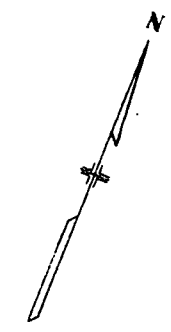


FED ROAD REG NO	DIVISION	PROJ NO	SHEET NO.
9	COLO.	I 70-3(22)217	345

Scale 1" = 50'  
See Plan Profile Sheets 15 through 18

**AS CONSTRUCTED**  
**REVISED** DATE JAN 1 1987

Slide Area  
Straight Creek



Hammond B-65

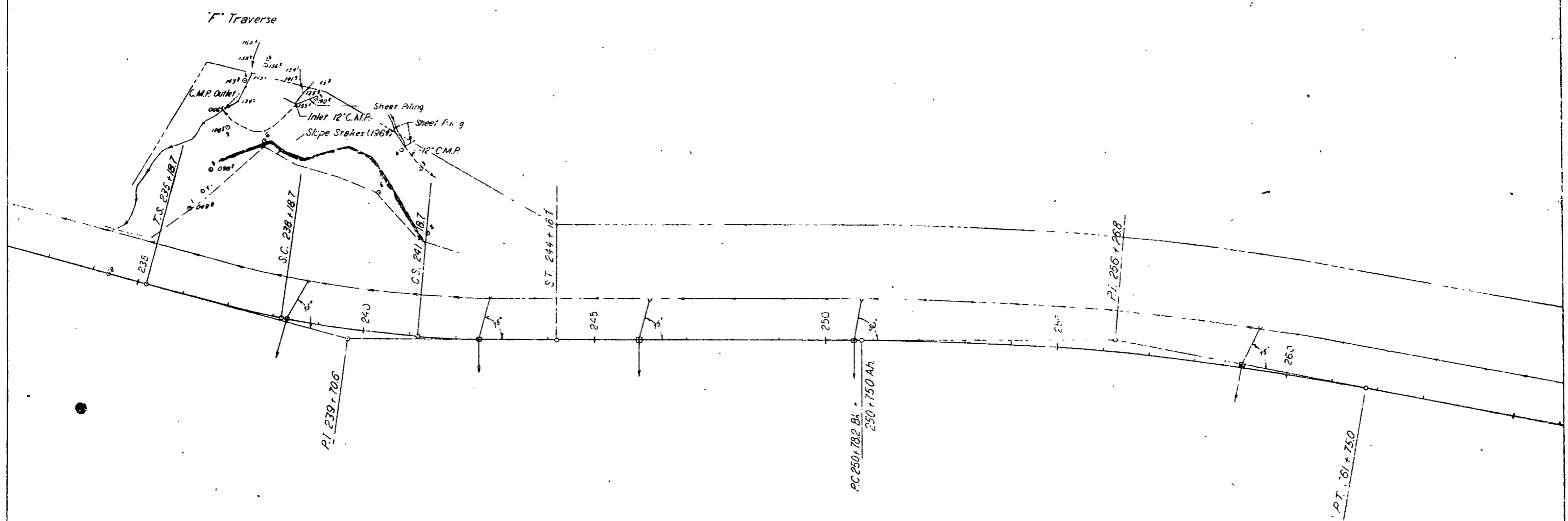
FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.
9	COLO.	I 70-3(2)217	346

Scale 1" = 100'

See Plan Profile Sheets 15116

**AS CONSTRUCTED**  
**REVISED** DATE JAN 3 1967

Slide Area  
 Straight Creek

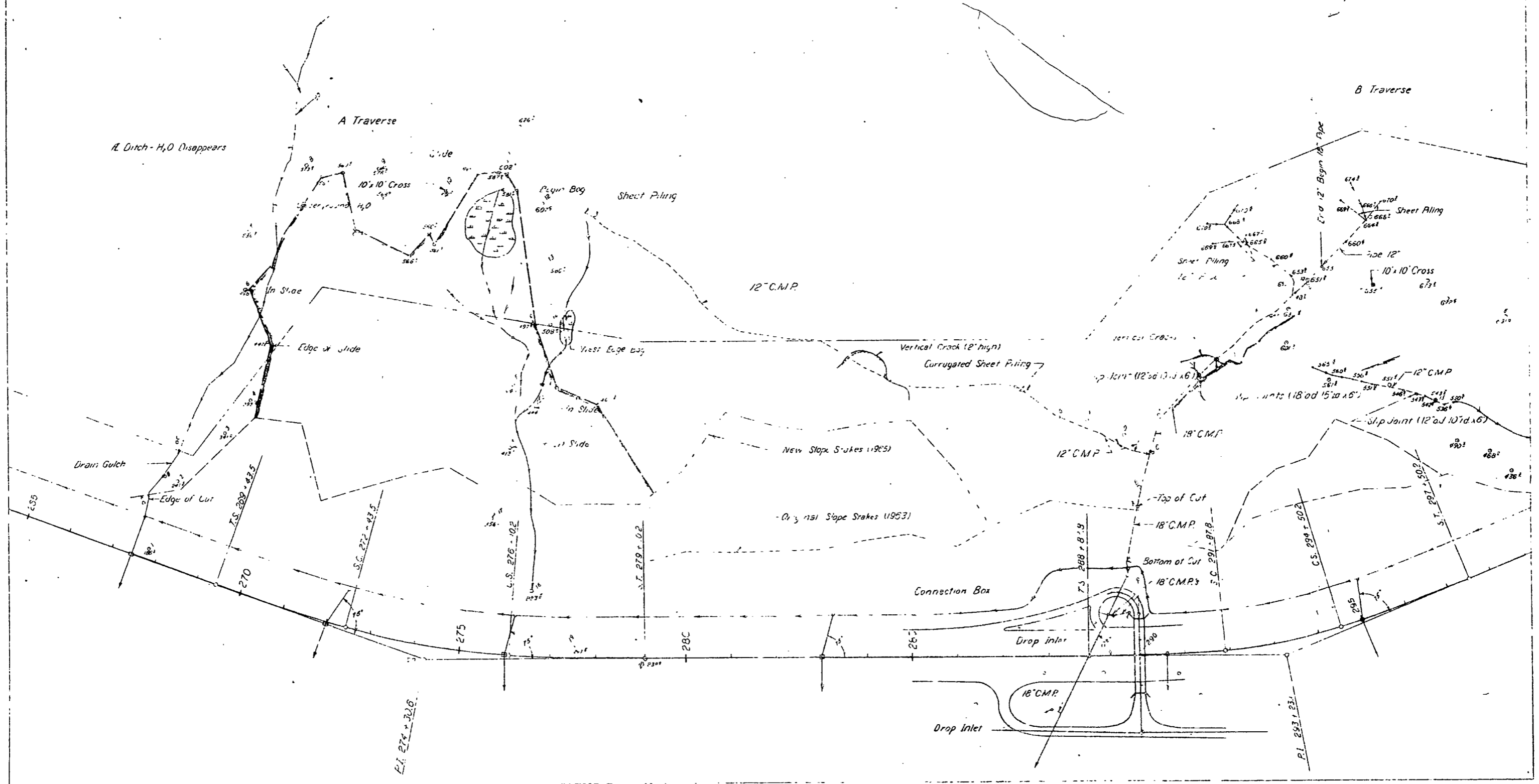
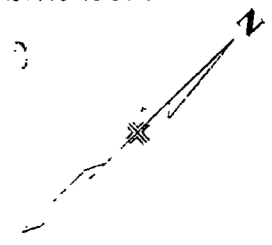


FED. ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.
9	COLO.	I 70-3(22)217	347

**AS CONSTRUCTED**  
**REVISED DATE**

Scale 1" = 100'  
 See Plan Profile Sheet # 17

Slide Areas  
 Straight Creek

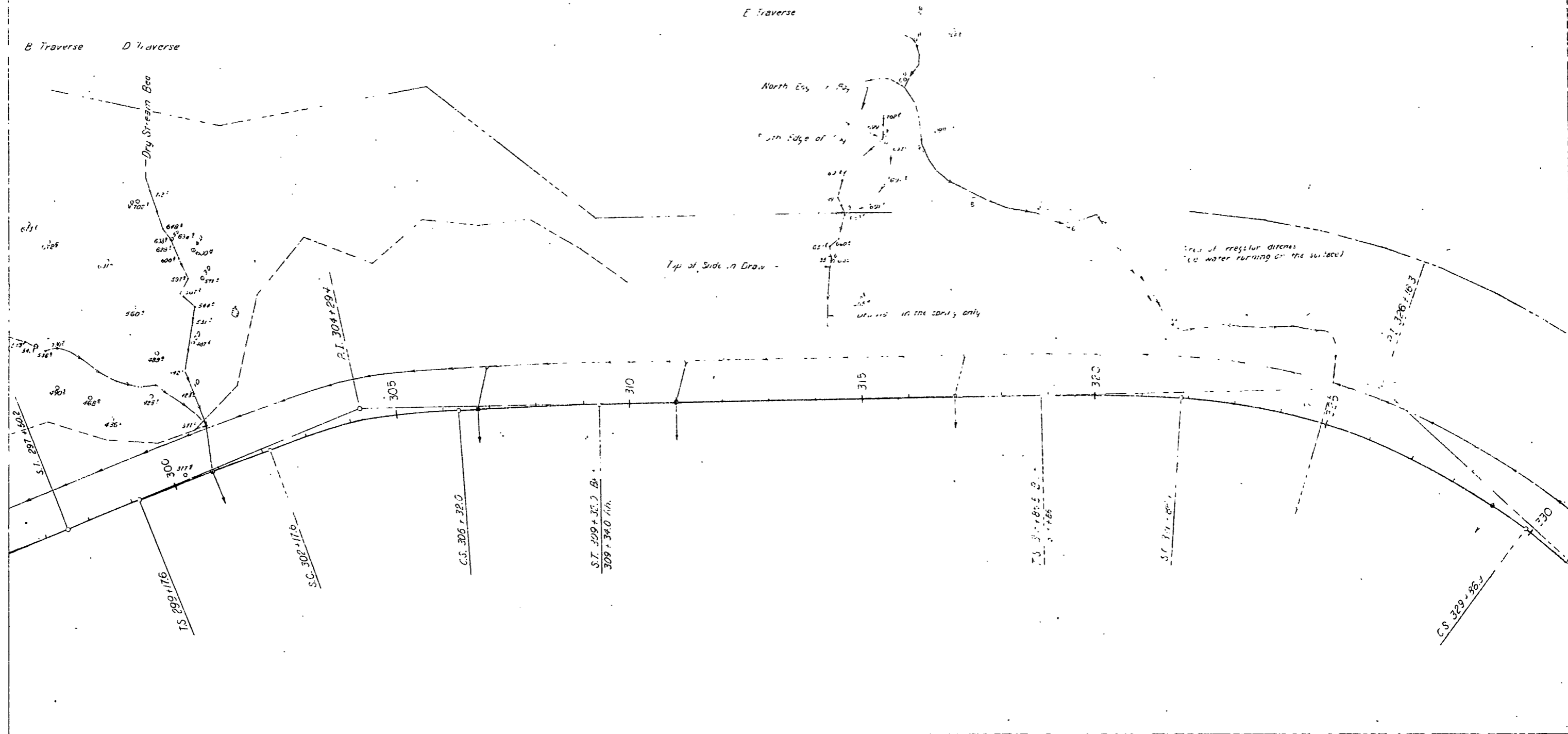
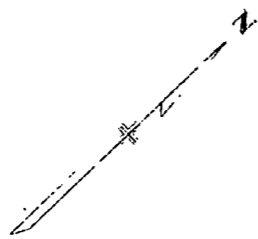


FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.
2	COLO.	I 70-3(22)217	348

Scale 1" = 100'  
See Plan Profile Sheet # 18

**AS CONSTRUCTED**  
**REVISED** DATE JAN 8 1961

Slide Area  
Straight Creek



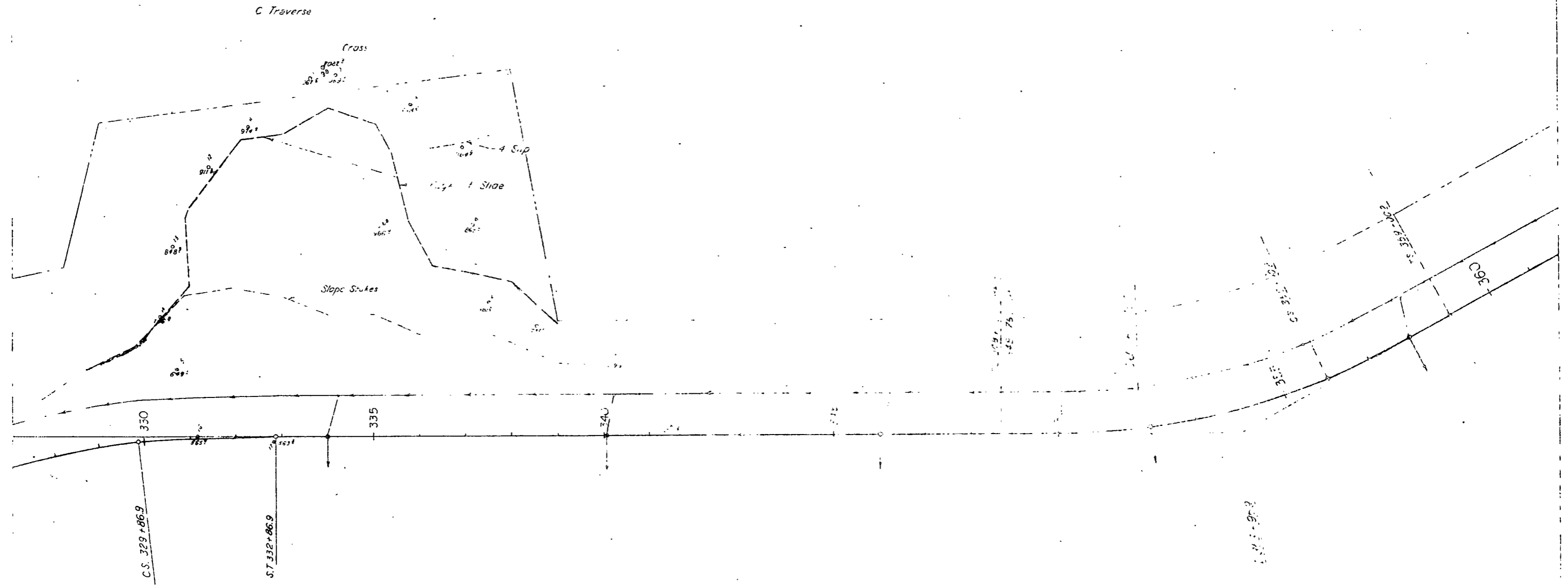
DO NOT TRIM

REG. NO.	DIVISION	PROJ. NO.	SHEET NO.
9	COLO.	I 70-3(22)217	349

DATE JAN 3 1967

Scale 1" = 100'  
See Plan Profile Sh # 19

Circle Area  
Straight Creek



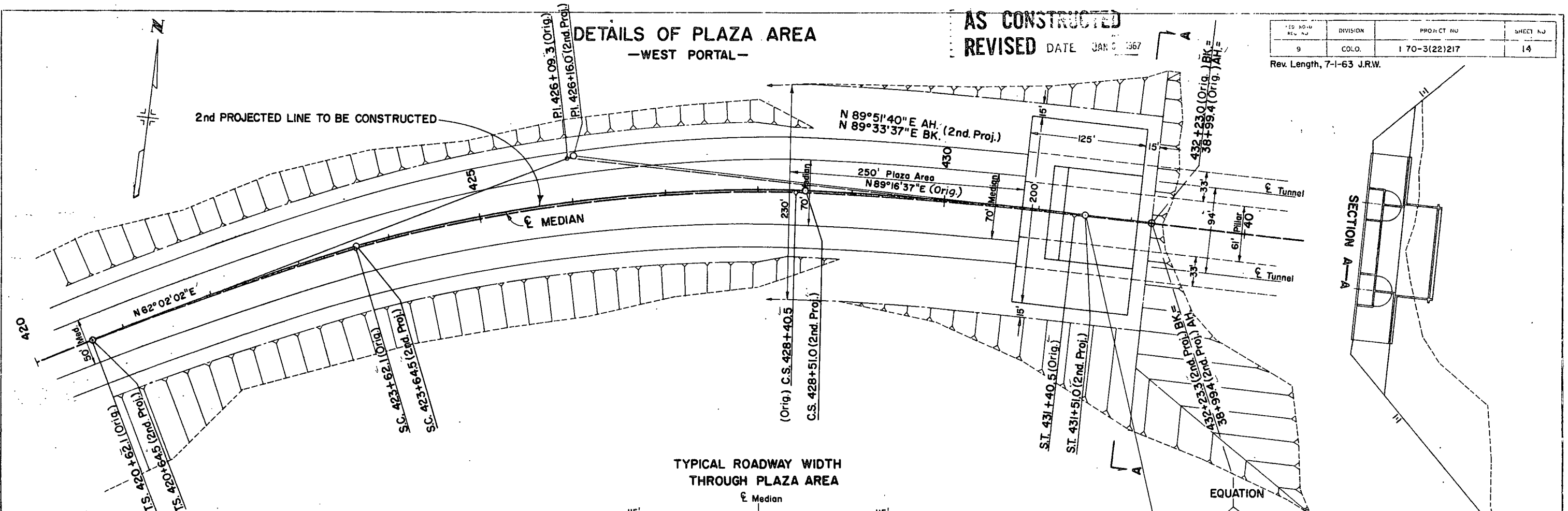
DO NOT TRIM

# DETAILS OF PLAZA AREA - WEST PORTAL -

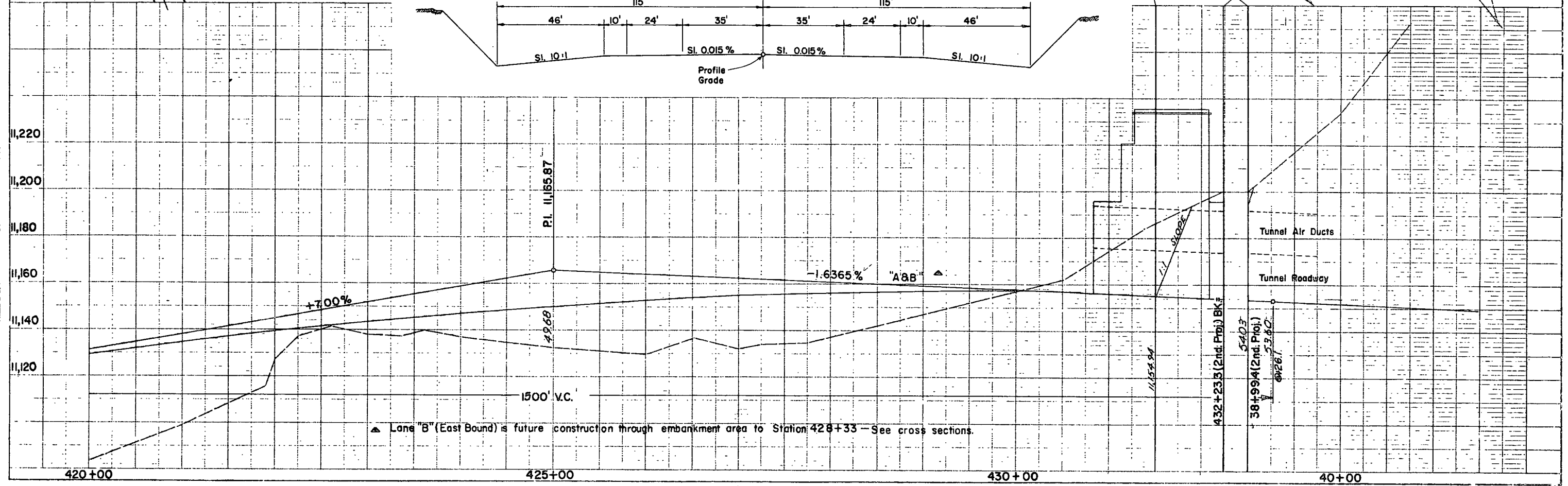
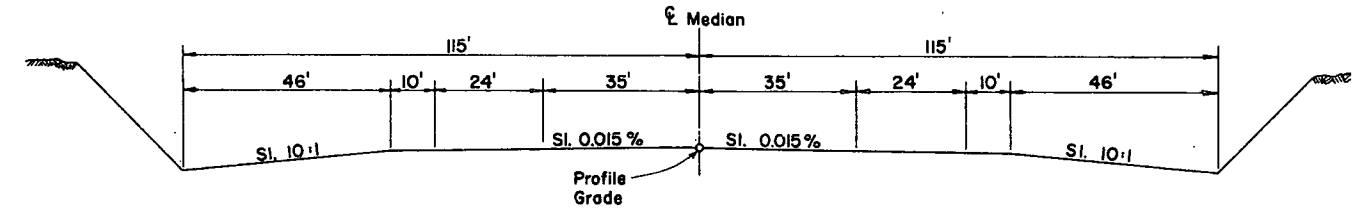
AS CONSTRUCTED  
REVISED DATE JAN 6 1967

ED. NO. & REV. NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLO.	170-3(22)217	14

Rev. Length, 7-1-63 J.R.W.



TYPICAL ROADWAY WIDTH  
THROUGH PLAZA AREA



▲ Lane "B" (East Bound) is future construction through embankment area to Station 428+33 - See cross sections.

229+ to 235+ Req'd 8" x 400 Lin Ft.  
 Perforated Underdrain, 1" S. 8" x 214 Lin Ft.  
 Unperforated Underdrain.

NOTE:  
 Where Underdrains are required, perforated pipe is to be used parallel to centerline, and unperforated pipe is to be used for the cross drain.

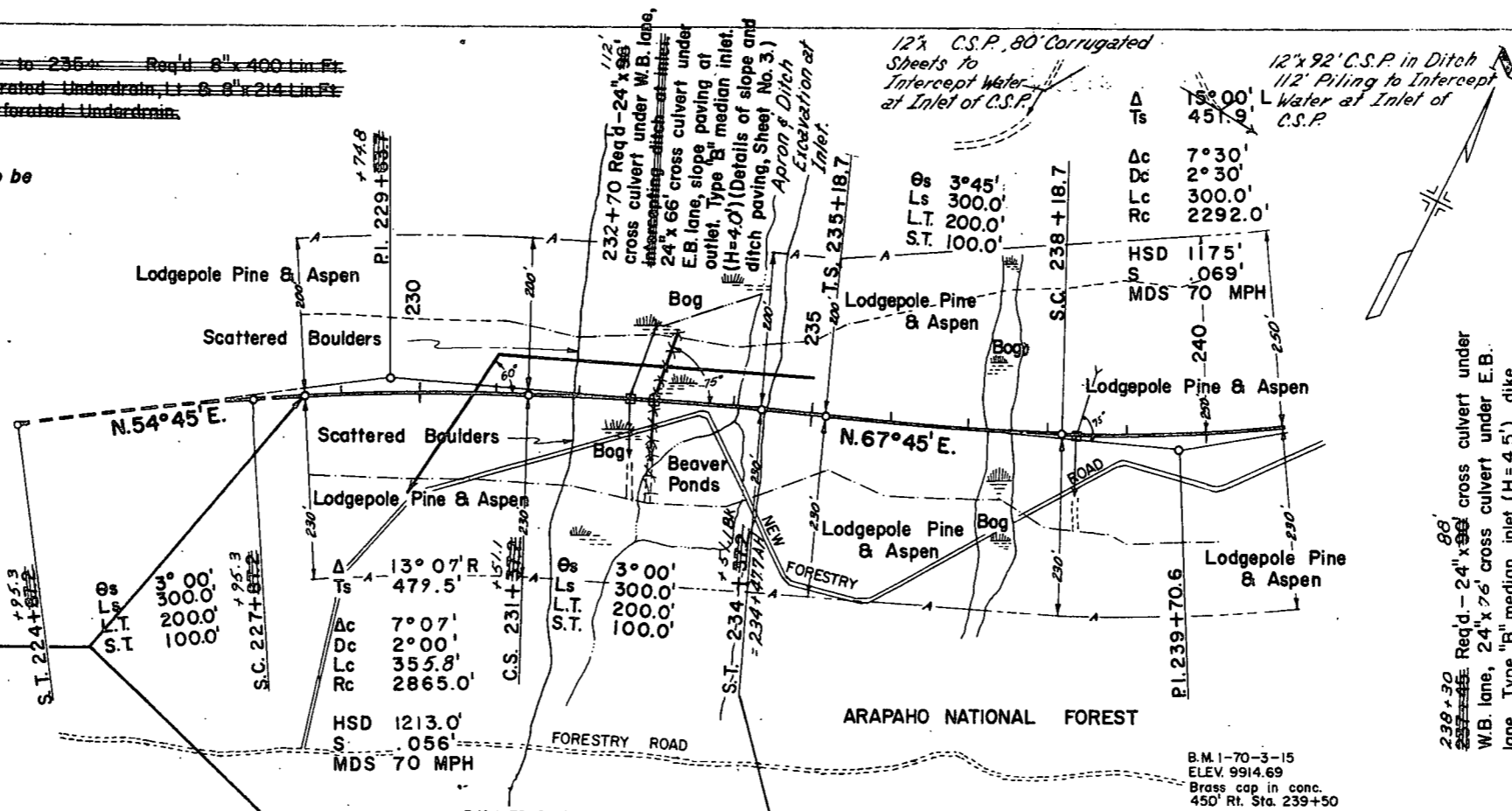
REG. NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLO.	170-3(22) 217	15

Revised Structure Notes, 8-19-63, J.R.W.

AS CONSTRUCTED  
 REVISED DATE JAN 3 1971

228+ - Req'd Identification Sign, Rt.

BEGIN PROJECT 170-3(22) 217  
 STA. 228+55

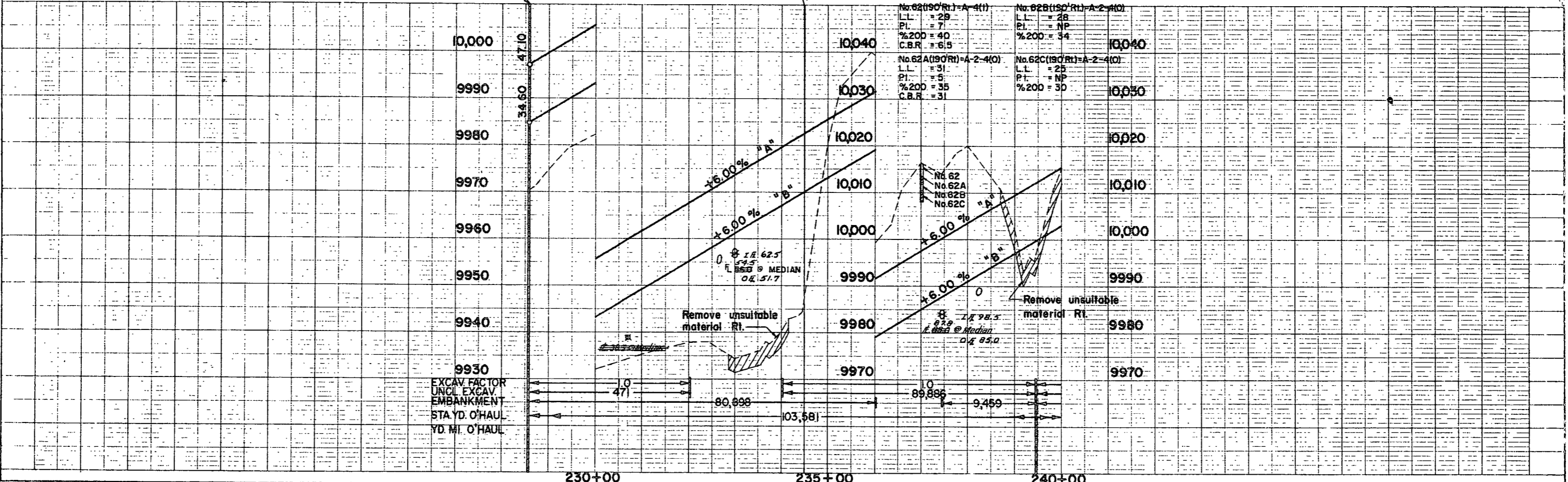


238+30 Req'd - 24" x 96" cross culvert under W.B. lane, 24" x 76" cross culvert under E.B. lane, Type "B" median inlet (H=4.5'), dike and Apron at inlet.

B.M. 1-70-3-15  
 ELEV. 9914.69  
 Brass cap in conc.  
 450' Rt. Sta. 239+50

B.M. 1-70-3-14  
 ELEV. 9883.13  
 Brass cap in conc.  
 455' Rt. Sta. 231+37

No. 62(190' Rt.)-A-4(1) L.L. = 29 P.I. = 7 %200 = 40 C.B.R. = 6.5	No. 62B(190' Rt.)-A-2-4(0) L.L. = 28 P.I. = NP %200 = 34
No. 62A(190' Rt.)-A-2-4(0) L.L. = 31 P.I. = 5 %200 = 35 C.B.R. = 31	No. 62C(190' Rt.)-A-2-4(0) L.L. = 25 P.I. = NP %200 = 30



EXCAV FACTOR  
 UNCL EXCAV  
 EMBANKMENT  
 STA YD. O'HAUL  
 YD. MI. O'HAUL

471      80,898      89,886      9,459

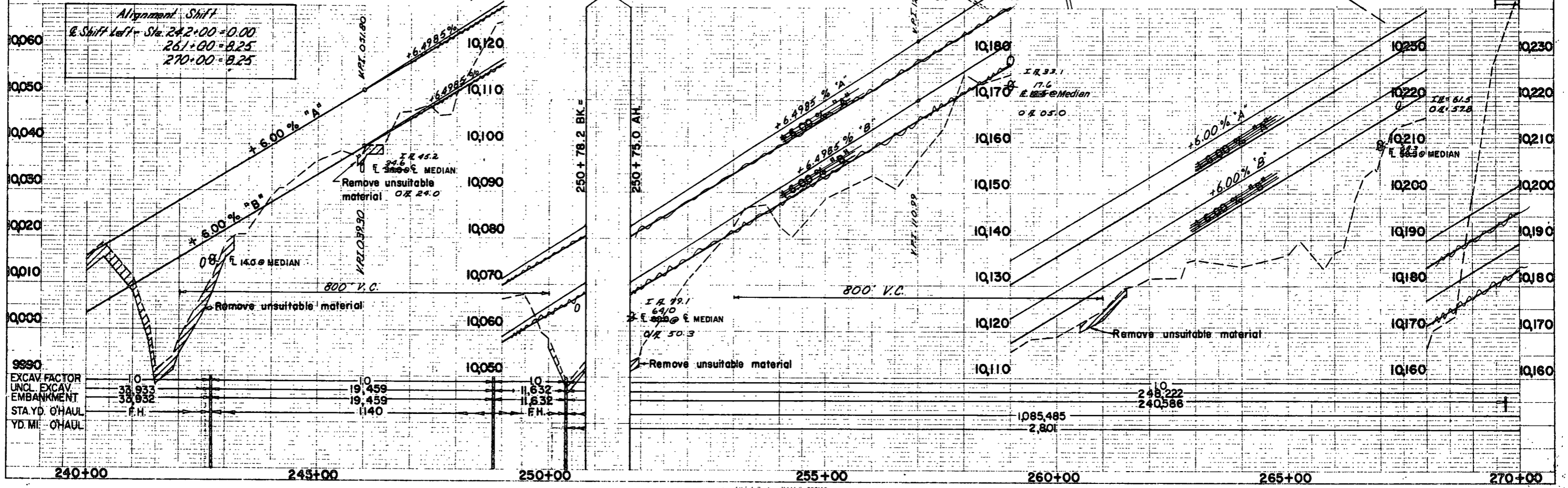
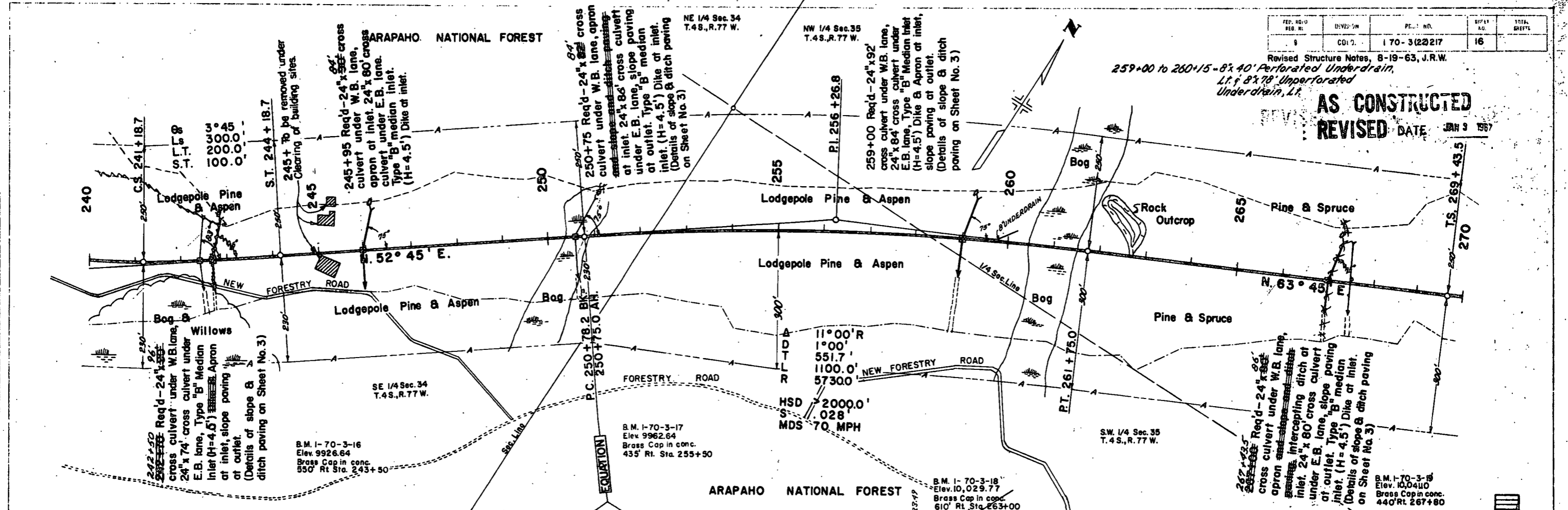
103,581



FED. ROAD DIST. NO.	SECTION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
170-3	CD 17	170-3(22217)	16	

Revised Structure Notes, 8-19-63, J.R.W.  
 259+00 to 260+15 - 8'x40' Perforated Underdrain,  
 Lt. & 8'x78' Unperforated Underdrain, Lt.

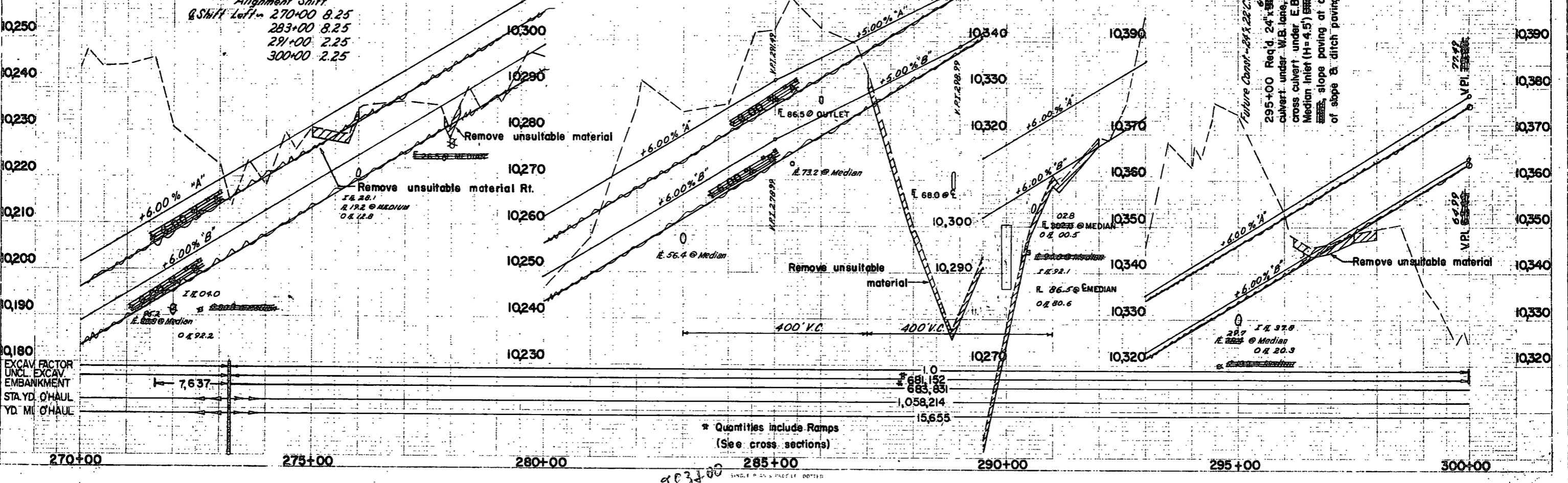
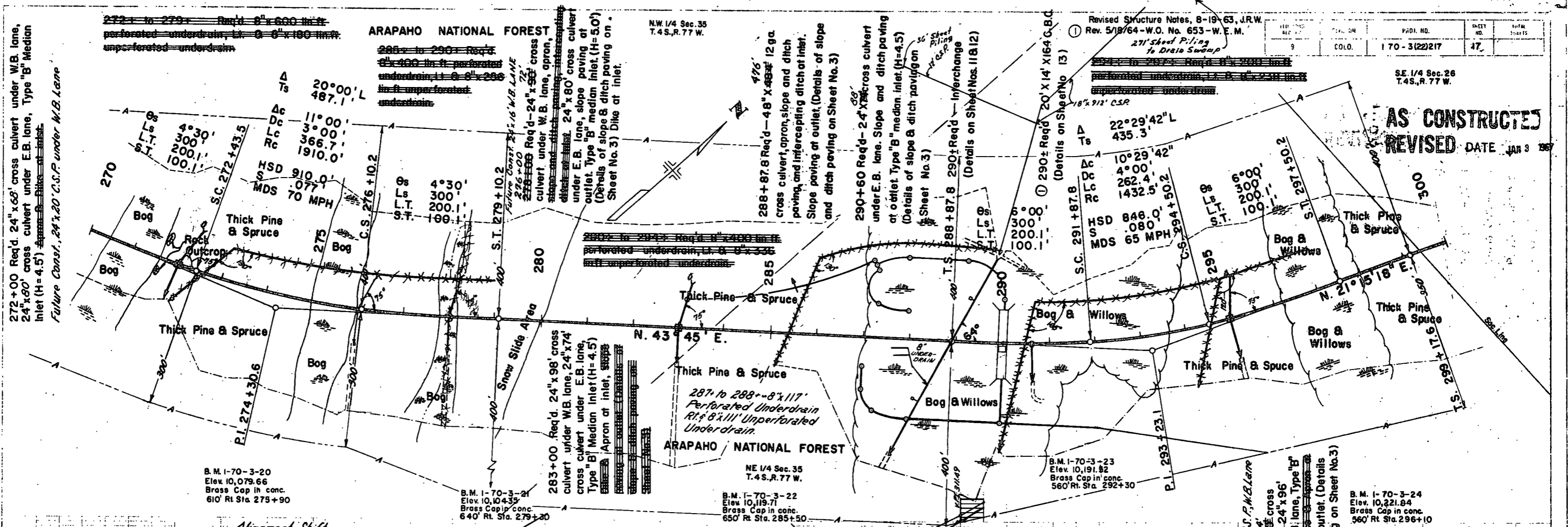
**AS CONSTRUCTED**  
**REVISED DATE** JAN 3 1967



WITH UNCL. EXCAV. CHECKED BY: [Signature] DATE: [Date] STRUCTURE MATERIALS: [Text]



1964



EXCAV FACTOR  
UNCL EXCAV  
EMBANKMENT  
STAYD. O'HAUL  
YD. M' O'HAUL

\* Quantities include Ramps  
(See cross sections)

983400

AS CONSTRUCTED  
REVISED DATE JAN 9 1964

Revised Structure Notes, 8-19-63, J.R.W.  
Rev. 5/18/64-W.O. No. 653-W.E.M.  
21' Sheet Piling  
to Drain Swamps

SE 1/4 Sec. 26  
T.4S., R.77 W.

N.W. 1/4 Sec. 35  
T.4S., R.77 W.

NE 1/4 Sec. 35  
T.4S., R.77 W.

B.M. 1-70-3-23  
Elev. 10,191.82  
Brass Cap in conc.  
560' Rt. Sta. 292+30

B.M. 1-70-3-24  
Elev. 10,221.84  
Brass Cap in conc.  
360' Rt. Sta. 296+10

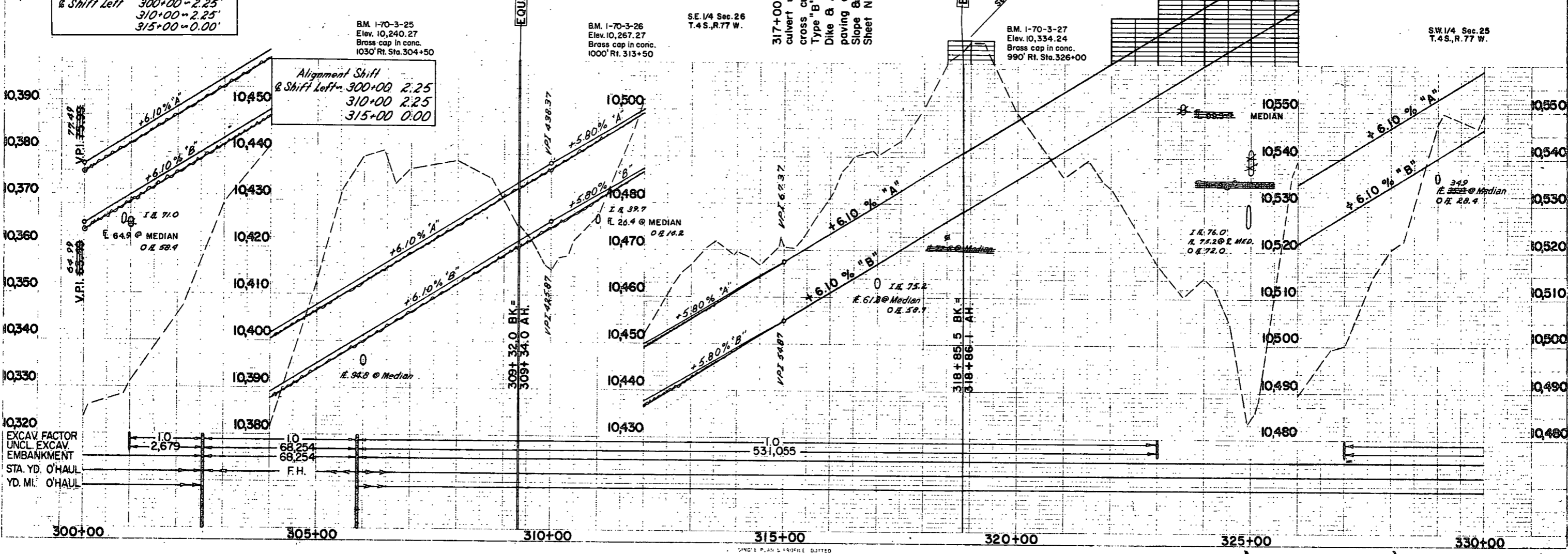
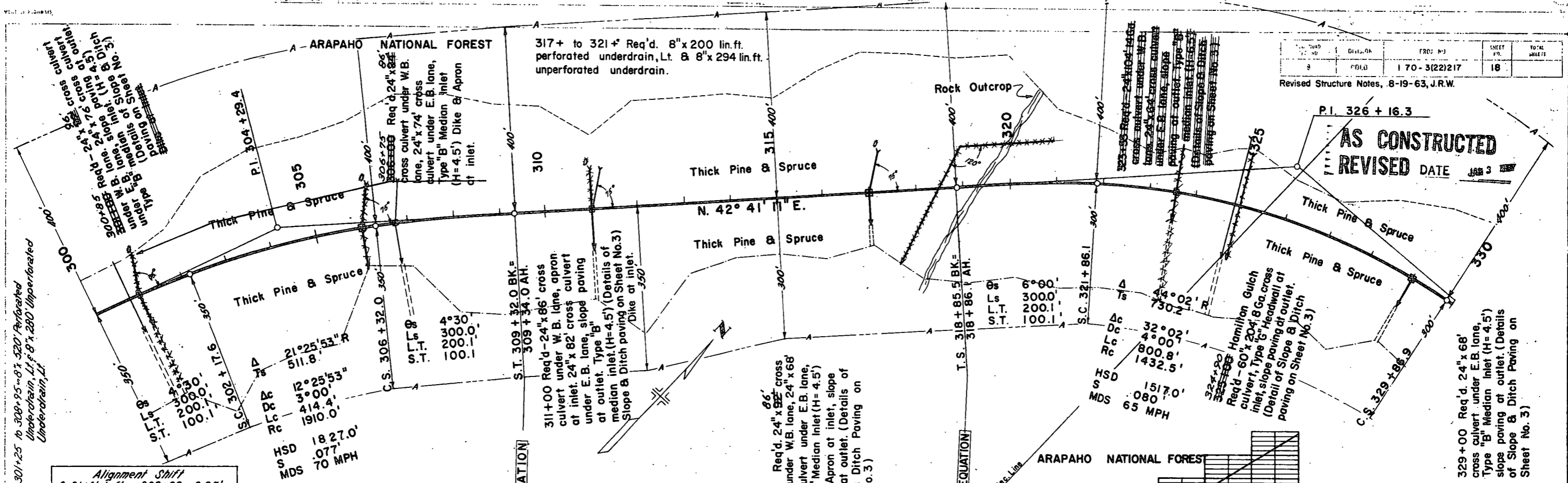
B.M. 1-70-3-20  
Elev. 10,079.66  
Brass Cap in conc.  
610' Rt. Sta. 275+90

B.M. 1-70-3-21  
Elev. 10,104.33  
Brass Cap in conc.  
640' Rt. Sta. 275+30

B.M. 1-70-3-22  
Elev. 10,119.71  
Brass Cap in conc.  
650' Rt. Sta. 285+50

NO.	DATE	BY	SHEET NO.	TOTAL SHEETS
9	1970	J.R.W.	18	

Revised Structure Notes, 8-19-63, J.R.W.





NE 1/4 Sec. 25  
T.4 S., R.77 W.

ARAPAHO NATIONAL FOREST

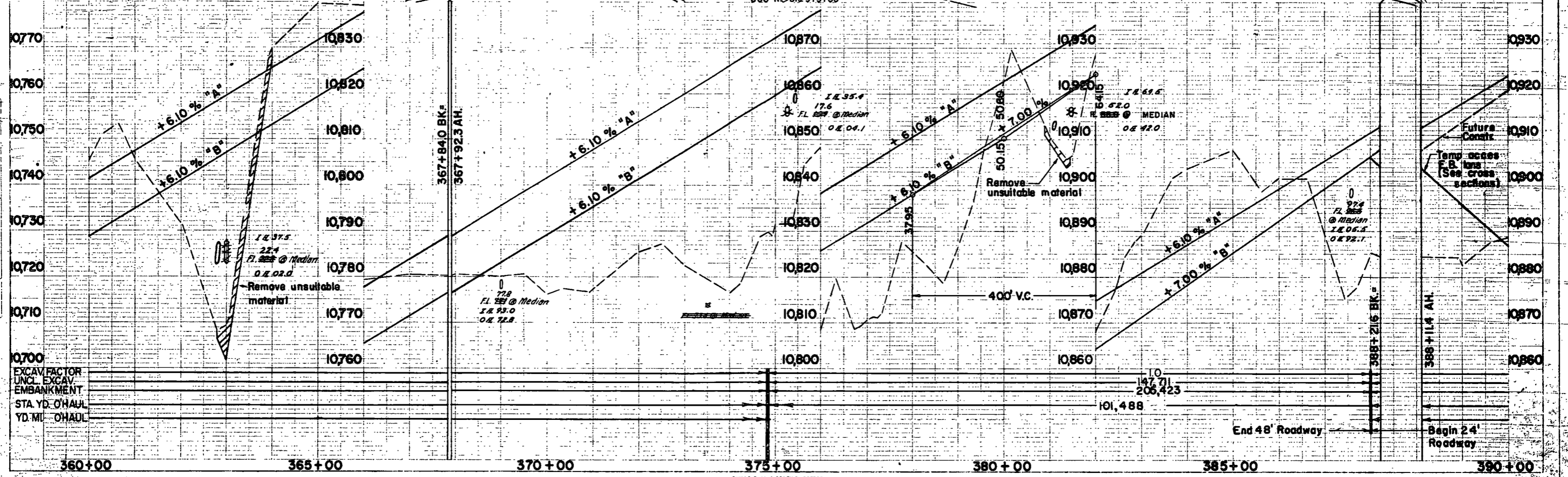
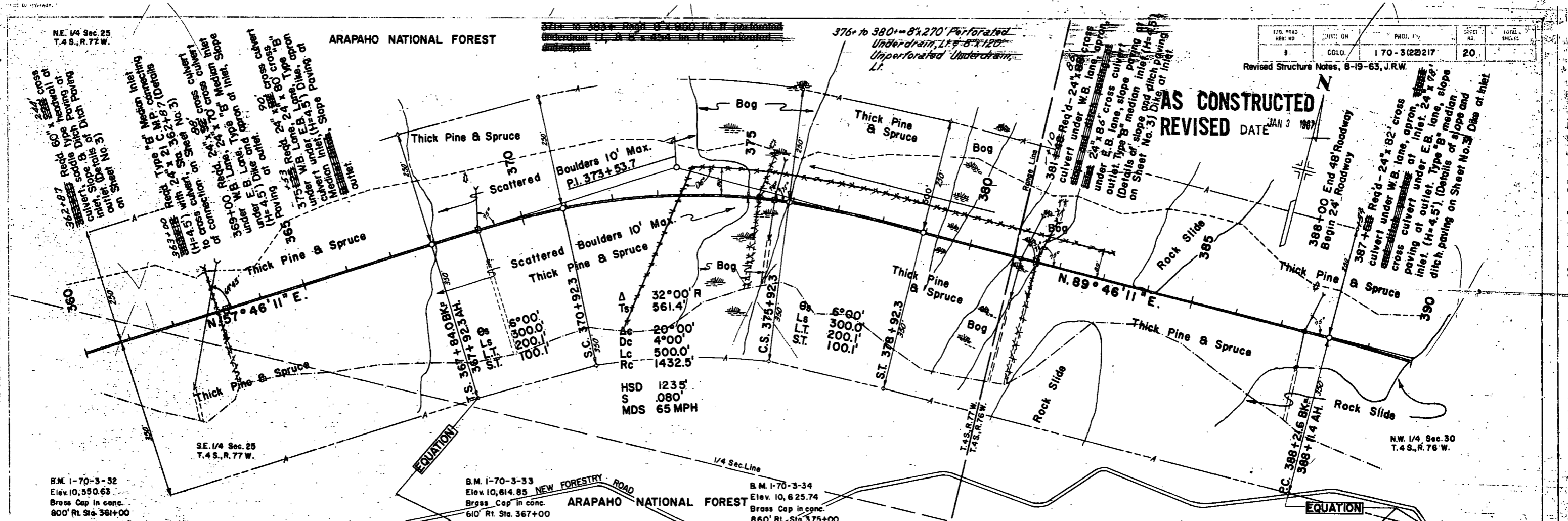
371+ to 383+ Road 6' x 6'50' In. B perforated  
Underdrain 12' x 6' x 6'50' In. B perforated  
Underdrain 12' x 6' x 6'50' In. B perforated

376+ to 380+ 8' x 270' Perforated  
Underdrain, L.F. 8' x 120'  
Unperforated Underdrain,  
L.F.

REV. NO.	DATE	BY	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.		170-3(22)217	20	

Revised Structure Notes, 8-19-63, J.R.W.

AS CONSTRUCTED  
REVISED DATE JAN 3 1987



EXCAVATOR  
UNCL EXCAV  
EMBANKMENT  
STA YD. O'HAUL  
YD. MI. O'HAUL



PROJECT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
170-3(20)217	CO.S.G.	170-3(20)217	22	

Rev. Length 7-1-63 J.R.W.

AS CONSTRUCTED  
REVISED DATE JAN 3 1967

